

REMARKS

The Office Action mailed on September 4, 2009, has been reviewed and the comments of the Examiner carefully considered. Applicants acknowledge the Examiner's withdrawal of all previously-pending rejections of the claims.

Claims 9, 10 and 17-22 are pending and are currently rejected.

**Rejection Under 35 U.S.C. § 103(a)**

Claims 9, 10 and 17-22 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Tunc (U.S. Patent No. 3,800,797) in view of Komai (U.S. Patent No. 5,561,114) or Reich (U.S. Patent No. 5,124,155). The Examiner is of the view that this combination of references would motivate the skilled artisan to arrive at the claimed invention. Applicants respectfully disagree with the rejection for the following reasons.

The test which must be met for a reference or a combination of references to establish obviousness has not been satisfied in the instant matter. The MPEP states, in relevant part, the proper test for obviousness:

Office policy is to follow *Graham v. John Deere Co.* in the consideration and determination of obviousness under 35 U.S.C. § 103 ...

[T]he four factual inquiries enunciated therein as a background for determining obviousness are as follows:

- (A) Determining the scope and contents of the prior art;
- (B) Ascertaining the differences between the prior art and the claims in issue;
- (C) Resolving the level of ordinary skill in the pertinent art; and
- (D) Evaluating evidence of secondary considerations. (MPEP § 2141).

When applying 35 U.S.C. § 103, the following tenets of patent law must be followed: 1) the claimed invention must be considered as a whole; 2) the references must be considered as a whole; 3) the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and 4) reasonable expectation of success is the standard with which obviousness is determined. MPEP § 2141 II.

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The rejection is based primarily on Tunc's teaching of barrier film (e.g., sodium hydroxyethyl cellulose sulfate) and Komai's disclosure that the sulfation degree is up to 1.5, and in some instances, up to 2.9. However, with respect to the degree of sulfation, the Tunc and Komai references present opposing points of view. Tunc teaches minimizing the degree of sulfation (e.g., see the bottom of column 3 and the top of column 4 of Tunc, which states "Specifically, by lowering the degree of sulfation, the barrier films of this invention become more resistant to salt solutions in that they retain their integrity after being subjected to these solutions for longer periods of time and that they exhibit higher tensile strengths when subjected to a given salt concentration for a given period of time. In general, if the D. S. is maintained, at below about 0.4 an adequately salt resistant film results. Preferably, the D. S. should be maintained at below about 0.3 and more preferably below 0.2."). Therefore, Tunc and Komai, as presented by the Examiner, have opposite teachings and cannot provide motivation for the skilled artisan to combine the two references. Reich does not address degree of sulfation at all, and therefore, does not change the motivation provided by Tunc to minimize the degree of sulfation.

As set forth in MPEP § 2145(D)(2), "It is improper to combine references where the references teach away from their combination." Citing *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983) (The claimed catalyst which contained both iron and an alkali metal was not suggested by the combination of a reference which taught the interchangeability of antimony and alkali metal with the same beneficial result, combined with a reference expressly excluding antimony from, and adding iron to, a catalyst.). Such is the case with the Tunc and Komai references, as these two references teach away from their combination. In doing so, these two references teach away from the presently-claimed invention.

Moreover, the Komai reference itself presents conflicting information regarding degree of sulfation. The Office Action references Komai's disclosure that the sulfation degree is up to 1.5, and in some instances, 2.9. However, that single statement in Komai merely references the versatility of the methods used in Komai, and the remainder of the Komai reference emphasizes minimizing the degree of sulfation as a key aspect of the invention.

For example, see column 3 of Komai, which sets forth, "Generally when natural cellulose is sulfated beyond DS=0.2, it is rendered partially water-soluble. Therefore, when an

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uncrosslinked cellulose fiber, for example natural cotton fiber, is sulfated for use as the raw material of the nonwoven fabric of the invention, it is recommendable to control its degree of substitution within the range of about 0.01 to 0.2, preferably about 0.01 to 0.1. Thus, with a DS value over 0.2, the cellulose sulfate fiber swells remarkably in water and even partially dissolves in water so that it fails to retain its fibrous geometry and strength, thus being unsuited for purposes of the invention. Furthermore, among cellulose sulfate fibers with degrees of sulfation within the above range, the higher the degree of sulfation of the fiber, the lower is its strength in water. Therefore, the degree of sulfation for the cellulose sulfate fiber to be used should be selected in consideration of the degree of possible reduction in fiber strength and the required adsorptive capacity of the product nonwoven fabric in its application as the adsorbent of the invention." (Emphasis added).

When Komai is read as a whole, for all it fairly teaches, Komai also teaches away from the presently-claimed invention, and cannot render the claimed invention obvious. Neither Tunc nor Reich, alone or in combination, remedies the deficiencies of Komai.

As none of Komai, Tunc, nor Reich, taken alone or in combination with one another, discloses the presently-claimed invention, Applicants submit that the combination of references does not render the pending claims obvious. The combination of references does not provide the skilled artisan with any suggestion or motivation to arrive at the claimed invention, and therefore, the combination of references provides no reasonable expectation of success in arriving at the claimed invention. Applicants respectfully request withdrawal of the rejection of claims 9, 10 and 17-22 under 35 U.S.C. § 103(a).

**Conclusion**

Applicants respectfully submit that the claims are in condition for allowance. An early Notice of Allowance is therefore earnestly solicited. Applicants invite the Examiner to contact the undersigned at (215) 963-5809 to clarify any unresolved issues raised by this response.

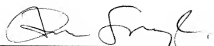
The Director is hereby authorized to charge/credit Deposit Account No. **50-0310** (Billing No. 101713-5025) for any other required fees, deficiencies or overpayments in connection with this Response.

Respectfully submitted,

**MICHAEL WILLIAM GRADY ET AL.**

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By:



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